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12/18/02  
PATENT  
Customer No. 22,852  
Attorney Docket No. 02481.1403-02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCE

In re Application of: )

Ulrich Stache et al. )

Application No.: 08/897,455 )

CPA Filed: May 31, 2001 )

Group Art Unit: 1616

Examiner: B. Badio

For: Corticoid-17,21-dicarboxylic esters and corticosteroid 17-carboxylic ester 21-carbonic esters, processes for their preparation and pharmaceuticals containing these compounds

Commissioner for Patents  
Washington, DC 20231

Sir:

**Reply Brief Under 37 C.F.R. § 1.193**

This Reply Brief responds to the Examiner's Answer mailed on October 18, 2002. Appellants focus this Reply Brief to items raised recently in the Examiner's Answer. Thus, to the extent that the Appellants decline to re-address each rejection in full in this Reply brief, that does not constitute acquiescence in the merits of any aspects of the rejections.

Claims 11-17 stand rejected as obvious under 35 U.S.C. § 103(a) in light of U.S. Patent No. 4,655,971 to Page et al. ("Page"). The claims also stand rejected under 35 U.S.C. § 103(a) as unpatentable in light of U.S. Patent No. 3,201,429 to Djerassi et al. ("Djerassi") (for claims 11, 12 and 14-17), or U.S. Patent No. 3,201,391 to Bowers ("Bowers") (for claims 11, 12 and 15-17) or U.S. Patent No. 3,133,940 to Oughton et al. ("Oughton") (for claims 11-13 and 15).

On page 7 of the Examiner's Answer, the Examiner stated that "[a]pplicant's argument is that none of the cited references exemplifies a compound wherein the 21-substituent has an aralkyl group." It is true that none of the cited references exemplifies such a compound. Appellant's arguments, however, involve more than that. Appellants have explained why the cited disclosures, each as a whole, would not have motivated one skilled in the art to make the inventions of claims 11-17.

These arguments included an analysis of what each document teaches in its text as well as the specific embodiments that each exemplifies.

Appellants have also questioned the Examiner's proposals for how one skilled in the art could have modified certain exemplified embodiments in the prior art to reach the claimed invention, and for how one skilled in the art could have followed certain selections of variables in the texts to reach the claimed invention. Appellants presented arguments as to why one skilled in the art would not have been motivated to make the modifications proposed by the Examiner, and how perhaps an incorrect point of view, that using hindsight, has been used to find the claimed invention obvious. Appellants also referred to a number of other documents cited previously by the Examiner during prosecution of this case. Those documents highlight that the art as a whole, subsequent to many of the documents used in the rejections, would not have motivated one skilled in the art to make the claimed invention.

On pages 7-8 of the Examiner's Answer, the Examiner stated that Page teaches that when its "R<sub>5</sub> is RCOO, R is one of three groups, i.e. an alkyl group, an aralkyl group or a phenyl group." The Examiner commented that "[b]ecause of the limited number of R groups, each would be readily envisaged by the ordinary artisan in the art and, thus, modifying the exemplified compounds by replacing said exemplified group with one of the other two groups taught by Page would be prima facie obvious." Appellants assume that the Examiner intended to refer to R' rather than to R, but disagree in any event with that analysis.

The Examiner's starting point, defining R<sub>5</sub> as R'COO, already bypasses some selections required in the definition of R<sub>5</sub> of Page, thus making the selection process appear perhaps more simple. The definition of R<sub>5</sub> reads as follows:

R<sub>5</sub> is hydroxyl or R<sub>6</sub>; where

R<sub>6</sub> is hydrogen, one or two halogen atom substituents or OR<sub>7</sub>, where R<sub>7</sub> is an acyl group of the formula R'CO in which R', which can be identical or different to R in the same molecule, is one of the following:

- (i) an alkyl group of 1 to 16 carbon atoms, whether straight-chained, branched or cyclic;
- (ii) an aralkyl group of 7 to 8 carbon atoms; or
- (iii) a phenyl group.

Thus, rather than starting with a definition of R<sub>5</sub> as R'COO, R<sub>5</sub> could alternatively have been chosen to be hydroxyl, or as an R<sub>6</sub> hydrogen atom, or as an R<sub>6</sub> halogen

atom or atoms. The process of deriving  $R_5$  substituents in the compounds of Page is not a matter of making a choice between three items.


As noted by the Examiner, a number of exemplified compounds in Page do define  $R_5$  as  $R_6$ ,  $R_6$  as  $OR_7$ , with  $R_7$  being  $R'CO$ . Even then, however, no compounds stray from defining  $R'$  as a methyl or ethyl group. This despite the fact that, theoretically, the disclosure at col. 1, lines 17-55 allows  $R'$  much greater freedom of being a straight, branched, or cyclic alkyl group of up to 16 carbon atoms, or of being an entirely different group such as the aralkyl group or phenyl group. Indeed, no exemplified compounds contain in the  $R_5$  position any cyclic group of any kind, whether aliphatic or aromatic. Moreover, even if one skilled in the art were to choose an (ii) aralkyl group, they still would not necessarily make the  $-O-CO-[(C_1-C_4)]$ -phenyl group in the substituent of the invention. An "aralkyl" group presumably also includes substituents such as  $-O-CO$ -phenyl-alkyl (in addition to  $-O-CO$ -alkyl-phenyl). Page does not appear to suggest a substituent like the Appellant's over a different one.

The Examiner particularly relied on Example 19 of Page in the rejection of claims 12-14. Evidence of record indicates that the compound of Example 19 would have been expected to have poor stability. That would have discouraged, rather than encouraged, those skilled in the art from using that compound as a starting point for making new compounds. With regard to the comments in the first full sentence on page 9 of the Examiner's Answer, Appellants note that the compounds of claims 13 and 14 differ in the definition of variable  $R(3)$  and not only in the definition of variable  $Y$ .

Lastly, the Examiner discounted the comparative evidence of record between the claimed compounds and certain other compounds as not a true side-by-side comparison with the closest prior art. The Examiner stated that prednicarbate, a reference compound used in the comparative tests, does not contain any  $R_5$  substituents covered by Page. Appellants do not agree. The drawing below illustrates how prednicarbate does contain an  $R_5$  substituents covered by the Page disclosure:

Please grant any further extensions of time required to enter this Reply Brief and charge any additional required fees to our deposit account 06-0916.

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